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10/582,652

06/13/2006

Armando Lara-Cambil

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EXAMINER

WILLIAMS, LELA

ART UNIT

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1787

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PAPER

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

| | | | |
|------------------------------|--------------------------------------|---|--|
| Office Action Summary | Application No. 10/582,652 | Applicant(s) LARA-CAMBIL ET AL. | |
| | Examiner LELA S. WILLIAMS | Art Unit 1787 | |

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 13 June 2006.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-3 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-3 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 13 June 2006 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413) Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftperson's Patent Drawing Review (PTO-948) | 5) <input type="checkbox"/> Notice of Informal Patent Application |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08) Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

Information Disclosure Statement

1. The listing of references in the Search Report is not considered to be an information disclosure statement (IDS) complying with 37 CFR 1.98. 37 CFR 1.98(a)(2) requires a legible copy of: (1) each foreign patent; (2) each publication or that portion which caused it to be listed; (3) for each cited pending U.S. application, the application specification including claims, and any drawing of the application, or that portion of the application which caused it to be listed including any claims directed to that portion, unless the cited pending U.S. application is stored in the Image File Wrapper (IFW) system; and (4) all other information, or that portion which caused it to be listed. In addition, each IDS must include a list of all patents, publications, applications, or other information submitted for consideration by the Office (see 37 CFR 1.98(a)(1) and (b)), and MPEP § 609.04(a), subsection I. states, "the list ... must be submitted on a separate paper." Therefore, the references cited in the Search Report have not been considered. Applicant is advised that the date of submission of any item of information or any missing element(s) will be the date of submission for purposes of determining compliance with the requirements based on the time of filing the IDS, including all "statement" requirements of 37 CFR 1.97(e). See MPEP § 609.05(a).

2. The listing of references in the specification is not a proper information disclosure statement. 37 CFR 1.98(b) requires a list of all patents, publications, or other information submitted for consideration by the Office, and MPEP § 609.04(a) states, "the list may not be incorporated into the specification but must be submitted in a separate paper." Therefore, unless

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the references have been cited by the examiner on form PTO-892, they have not been considered.

Claim Objections

3. Claim 2 is objected to because of the following informalities: the claim refers to claim 1 twice. Appropriate correction is required.

Use Claims

4. The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

35 U.S.C. 101 reads as follows:

Whoever invents or discovers any new and useful process, machine, manufacture, or composition of matter, or any new and useful improvement thereof, may obtain a patent therefor, subject to the conditions and requirements of this title.

5. Claims 1-3 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

6. Claims 1-3 provides for “[t]he use of extracts and compounds of plants from the Alliums genus as preservatives for the food and agrifood industry”, but, since the claim does not set forth any steps involved in the method/process, it is unclear what method/process applicant is intending to encompass. A claim is indefinite where it merely recites a use without any active, positive steps delimiting how this use is actually practiced.

Claims 1-3 are rejected under 35 U.S.C. 101 because the claimed recitation of a use, without setting forth any steps involved in the process, results in an improper definition of a

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process, i.e., results in a claim which is not a proper process claim under 35 U.S.C. 101. See for example *Ex parte Dunki*, 153 USPQ 678 (Bd.App. 1967) and *Clinical Products, Ltd. v. Brenner*, 255 F. Supp. 131, 149 USPQ 475 (D.D.C. 1966).

Claim Rejections - 35 USC § 112

7. The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

8. Claims 1-3 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

Regarding claim 1, The phrases “such as”, “for example”, “very particularly”, “particularly” (p.1, lines 7, 10, 11, 12, 14, 15, 21, 23, 25, 31, 34 & p.2, lines 1, 9, 12, 13, 19, 23, 24) render the claim indefinite because it is unclear whether the limitation(s) following the phrase are part of the claimed invention. See MPEP § 2173.05(d).

The phrases "etc" and "in general" are indefinite given it is unclear to what is meant by the phrases or what is encompassed by the phrases.

The claim states for “garden produce” (lines 10, 23, 34 & p.2, lines 13), which is indefinite given it is not clear what produce is encompassed by this phrase.

The claim also cites improper Markush language (p.1, lines 13-15). Applicant is reminded “A Markush-type claim recites alternatives in a format such as “selected from the group consisting of A, B and C.” See *Ex parte Markush*, 1925 C.D. 126 (Comm’r Pat.1925).” (See MPEP 803.2 [R-5]). As currently written the language is interpreted as compounds selected

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from the Allium genus, thiosulfinates, thiosulfonates, 3-vinyl-4H-1,2-dithiin, 2-vinyl-4H-1,3-dithiin, or an ajoene.

The claim recites the limitation "the mixture of the products resulting from the decomposition or transformation" in lines 26-28. There is insufficient antecedent basis for this limitation in the claim.

It is unclear to what is "the mixture of products". Is it one of the choice of the extracts and compounds, i.e. thiosulfinates, thiosulfonates, 3-vinyl-..., ajoene, and mixtures of products?

Claim 1 also recites the limitation "the different fractions" in line 27. There is insufficient antecedent basis for this limitation in the claim.

The claim states "solid coatings of any class" (p.2, line 21) which is indefinite given it is unclear to what "classes" are being referred to.

The term "however long the transformation or decomposition lasts or is maintained" (p.2, line 9) is a relative term which renders the claim indefinite. The term is not defined by the claim, the specification does not provide a standard for ascertaining the requisite degree, and one of ordinary skill in the art would not be reasonably apprised of the scope of the invention. Given that transformation and decomposition are two different processes which can occur at different rates and applicant states "is maintained", there is no definite time frame.

Regarding claim 2, the claim states "according to the field....in the first section of claim 1." There are no clear indications of sections in claim 1; therefore it is unclear to what applicant is referring. Further, a dependent claim can not depend on just part of the independent claim.

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The claim states "in a coating according to claim 1". The scope of the claim is confusing given that claim 1 is not drawn to a coating.

The addition of the word "type" (line 30) extends the scope of the claims so as to render them indefinite since it is unclear what "type" is intended to convey. The addition of the word "type" to the otherwise definite expression renders the definite expression indefinite by extending its scope. *Ex parte Copenhaver*, 109 USPQ 118 (Bd. App. 1955).

Regarding the use of "can be" and "may be" language in the claim, applicant is reminded "[c]laim scope is not limited by claim language that suggests or makes optional but does not require steps to be performed, or by claim language that does not limit a claim to a particular structure." (See MPEP 2111.04 [R-3]). Therefore the optional step is given no patentable weight.

Regarding claim 3, the claim states "according to the field...in the first section of claim 1." There are no clear indications of sections in claim 1; therefore it is unclear to what applicant is referring. Further, a dependent claim can not depend on just part of the independent claim.

The claim states "fields of application"; it is unclear to what is meant by this.

Claim 3 recites the limitation "the fields of application". There is insufficient antecedent basis for this limitation in the claim.

The claim refers to "coatings or encapsulations according to claim 2". The scope of the claim is confusing given that claim 2 is not drawn to coatings or encapsulations.

Claim Rejections - 35 USC § 102

9. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(a) the invention was known or used by others in this country, or patented or described in a printed publication in this or a foreign country, before the invention thereof by the applicant for a patent.

10. Claims 1-3 are rejected under 35 U.S.C. 102(b) as being anticipated by Plummer US Pat No. 5, 705,152.

Regarding claim 1, Plummer discloses the use of “an antimicrobial composition comprising an antimicrobial material derived from the plant family Alliums” (abstract) and that “is known that antimicrobial materials can be extracted from the plant family Alliums (which includes edible plants such as onions, chives, shallots, leek and garlic). The antimicrobial properties of garlic are well documented and garlic juice has been shown to inhibit the growth of a variety of pathogenic micro-organisms including Staphylococcus, Klebsiella, Proteus, Escherichia coli and Salmonella.” (col. 1, lines 9-15). Claim 1 states “intended to be used” or “the purpose” (p1, lines 4, 6, 19, 25, 26, 30 & p.2, line 10, 21). The intended use of a composition is given no patentable weight.

It is noted the recitation in the claims that the extracts and compound “is intended to be used as antimicrobial preservative for food and agrifood industry...” (Line 3) is merely an intended use. Applicants attention is drawn to MPEP 2111.02 which states that intended use statements must be evaluated to determine whether the intended use results in a structural difference between the claimed invention and the prior art. Only if such structural difference

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exists, does the recitation serve to limit the claim. If the prior art structure is capable of performing the intended use, then it meets the claim.

It is the examiner's position that the intended use recited in the present claims does not result in a structural difference between the presently claimed invention and the prior art and further that the prior art structure is capable of performing the intended use. Given that Plummer disclose an antimicrobial composition derived from the Alliums family as presently claimed, it is clear that the composition of Plummer would be capable of performing the intended use, i.e. antimicrobial preservatives, presently claimed as required in the above cited portion of the MPEP.

Regarding claim 2, Plummer discloses an antimicrobial composition derived from the Alliums family as discusses above. The reference does not expressly disclose encapsulation of the extracts; however, given the present claim states the extracts encapsulation as an optional step, i.e. "can be incorporated", and the reference teaches a powder form (col. 2, lines 66- col. 3, line 5) and it is known in the art that powders 'can be incorporated into any type of encapsulation", Plummer inherently discloses the claim limitations.

Further, it is noted the recitation in the claims that the extracts and compound "is intended to be used as an antimicrobial preservative for food and agrifood industry..." (Line 25) is merely an intended use. Applicants attention is drawn to MPEP 2111.02 which states that intended use statements must be evaluated to determine whether the intended use results in a structural difference between the claimed invention and the prior art. Only if such structural difference exists, does the recitation serve to limit the claim. If the prior art structure is capable of performing the intended use, then it meets the claim.

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It is the examiner's position that the intended use recited in the present claims does not result in a structural difference between the presently claimed invention and the prior art and further that the prior art structure is capable of performing the intended use. Given that Plummer disclose an antimicrobial composition derived from the Alliums family as presently claimed, it is clear that the composition of Plummer would be capable of performing the intended use, i.e. antimicrobial preservatives, presently claimed as required in the above cited portion of the MPEP.

Regarding claim 3, Plummer discloses the use of "an antimicrobial composition comprising an antimicrobial material derived from the plant family Alliums" (abstract) and that "is known that antimicrobial materials can be extracted from the plant family Alliums (which includes edible plants such as onions, chives, shallots, leek and garlic). The antimicrobial properties of garlic are well documented and garlic juice has been shown to inhibit the growth of a variety of pathogenic micro-organisms including Staphylococcus, Klebsiella, Proteus, Escherichia coli and Salmonella." (col. 1, lines 9-15). Garlic inherently has a flavor and it is known in the art to use the flavor in food products.

Further, it is noted the recitation in the claims that "[t]he use of compounds of plants from the Allium genus as flavors or flavoring agents..." (Line 35) is merely an intended use. Applicants attention is drawn to MPEP 2111.02 which states that intended use statements must be evaluated to determine whether the intended use results in a structural difference between the claimed invention and the prior art. Only if such structural difference exists, does the recitation serve to limit the claim. If the prior art structure is capable of performing the intended use, then it meets the claim.

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It is the examiner's position that the intended use recited in the present claims does not result in a structural difference between the presently claimed invention and the prior art and further that the prior art structure is capable of performing the intended use. Given that Plummer disclose an antimicrobial composition derived from the Alliums family as presently claimed, it is clear that the composition of Plummer would be capable of performing the intended use, i.e. flavoring, presently claimed as required in the above cited portion of the MPEP.

11. Claims 1-3 are rejected under 35 U.S.C. 102(b) as being anticipated by Yamashita et al. JP 60165165.

Regarding claims 1-3, the reference teaches a "sporicide contains an extract, such as a juice, its water extract, an aroma component obtained by a steam distillation method, or an extract obtained by a liquefied carbon dioxide gas extraction method, as an active ingredient, the juice being produced by grinding the various parts, e.g. bulbs, stems, leaves, etc., of *Allium sativum*, *Allium bakeri*, *Allium fistulosum* L., *Allium cepa* L., *Lilium auratum*, *Allium tuberosum* *Allium victorialis* L., etc., and subsequently squeezing the ground product. The extract can be coated directly on the surface of a food, etc., mixed with the food, or further mixed with other components [a type of encapsulation], e.g. a binder such as cyclodextrin or chitosan, an antioxidant, a filler or a bactericide such as sorbic acid. Since being originated from the natural substance, the sporicide can safely be used." (abstract). Claim 1 states "intended to be used" or "the purpose" (p1, lines 4, 6, 19, 25, 26, 30 & p.2, line 10, 21). The intended use of a composition is given no patentable weight.

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Further, it is noted the recitation in the claims that “[t]he use of compounds of plants from the *Allium* genus as an antimicrobial preservative for food and agrifood industry...” (claims 1 and 2) and for “flavors or flavoring agents...” (claim 3) is merely an intended use. Applicants attention is drawn to MPEP 2111.02 which states that intended use statements must be evaluated to determine whether the intended use results in a structural difference between the claimed invention and the prior art. Only if such structural difference exists, does the recitation serve to limit the claim. If the prior art structure is capable of performing the intended use, then it meets the claim.

It is the examiner’s position that the intended use recited in the present claims does not result in a structural difference between the presently claimed invention and the prior art and further that the prior art structure is capable of performing the intended use. Given that Plummer disclose an antimicrobial composition derived from the *Alliums* family as presently claimed, it is clear that the composition of Plummer would be capable of performing the intended use, i.e. antimicrobial preservative and/or flavoring, presently claimed as required in the above cited portion of the MPEP.

Conclusion

12. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure. FR 2779615, Singh et al. "Antifungal activity of ajoene a constituent of garlic", and Mei-Chin et al. “Inhibitory effect of seven *Allium* plants upon three *Aspergillus* species” are all cumulative to the rejections of record.

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Any inquiry concerning this communication or earlier communications from the examiner should be directed to LELA S. WILLIAMS whose telephone number is (571)270-1126. The examiner can normally be reached on Monday to Thursday from 7:30am-5pm (EST).

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Callie Shosho can be reached on 571-272-1123. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

LELA S. WILLIAMS
Examiner, Art Unit 1787

/L. S. W. /

/Callie E. Shosho/
Supervisory Patent Examiner, Art Unit 1787

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